Response dated October 4, 2006

Reply to Final Office Action of June 5, 2006

#### REMARKS/ARGUMENTS

The Final Office Action of June 5, 2006 has been carefully reviewed and these remarks are responsive thereto. Claims 1-8 and 10-12, 14-28, 30 and 32-43 are pending. Claims 9, 13, 29 and 31 are cancelled. Claims 1, 3-8, 10-12, 14-28, 30 and 32-43 were rejected under 35 U.S.C § 102(e) as being anticipated by U.S. Patent No. 6,678,548 to Echauz et al. ("Echauz"). Claims 2 and 9 were objected to as being dependent on rejected claims but were deemed allowable if rewritten in independent form.

### Interview Summary

Applicants' representatives would like to express their appreciation for the time taken by the Examiner to discuss this case. During the interview, the allowability of claims that contained limitations similar to the limitation in claim 2 was discussed. The Examiner indicated that while logically these claims would be allowable if claim 2 was allowed, the allowability of claim 2 was being reconsidered and would likely not be maintained in a subsequent office action. The Examiner further suggested that an additional reference not yet officially applied in this case, U.S. Patent No. 6,594,524 to Esteller et al. (Esteller), would also prove a barrier to allowing the subject matter of claim 2. To the extent possible, Applicants address their remarks to the references of record, including the Esteller reference, which will be cited in an IDS to ensure official notice of same is taken.

# Allowable Subject Matter

Applicants would like to express their appreciation of the indication of allowable subject matter. Claim 1 has been amended to include the features of claim 9, and therefore is believed be in condition for allowance.

# Finality of the Office Action

As will be discussed below, the Office Action has failed to address all the features of some of the claims in the Office Action and therefore the Final Office Action does not appear to be complete. Accordingly, withdrawal of the finality of the Office Action is respectfully requested.

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#### Cancelled Claims

Claims 9 and 23 have been cancelled. The features of claim 9 have been incorporated in claim 1. The features of claim 23 have been incorporated into claim 15.

### Amendment to the Claims

Claim 1 has been amended to include the limitation of claim 9, and claim 9 has been cancelled, thus no new matter has been added.

Claim 2 has been amended to correct minor informalities; however, no change in the scope of the claim was made.

Claim 10 has been amended to correct a minor informality and entry of same is respectfully requested.

Claim 15 has been amended to recite the features of claim 23, thus no new matter was added.

## Rejection under 35 U.S.C. § 102(e) - Echauz

Claims 1, 3-8, 10-12, 14-28, 30 and 32-43 were rejected under 35 U.S.C. § 102(e) as being anticipated by Echauz.

As noted above, claim 1 has been amended to recite the features of claim 9, which has been indicated as being allowable. Therefore, claim 1 is believed to be allowable. Claims 2-8, 10-12 and 14 are allowable for at least the reasons supporting the allowability of claim 1 and for the additional features recited therein. Regarding claim 2, while Applicants disagree with any suggestion that claim 2 is not patentable for at least the features recited therein and the rational provided by the Office Action, the inclusion of the features of claim 9 into claim 1 moots the issue of whether the allowability of claim 2 would be maintained and therefore the features of claim 2 will not be independently addressed.

Claim 15 has been amended to recite a feature previously recited in claim 23. Applicants respectfully submit that claim 23 included features similar to claim 9, which was deemed allowable, therefore Applicants respectfully submit that claim 15 is allowable for at least the reasons indicated in the Office Action with respect to claim 9.

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Claims 16-22, 24-29, 30 and 32 depend from claim 15 and are allowable for at least the reasons claim 15 is allowable and for the additional features recited therein.

The Office Action suggested that claims 33-43 were rejected for substantially the same reasoning that was used with respect to the other rejected claims. However, Applicants respectfully submit that claims 33-43 recite features that have not been rejected in the other claims, therefore it appears that the rejection of claims 33-43 is incomplete because the Office Action failed to show that all the features of claims 33-43 are disclosed by Echauz. In other words, claims 33-43 include features that have not been addressed in an Office Action to date.

For example, claim 33 recites "determining that a sensed neurological signal represents a detection cluster" and "identifying at least one feature in the detection cluster." Thus, the features being identified is a feature of the detection cluster itself, rather than just a feature of the neurological signal. Therefore, claim 33 is directed toward a level of post-processing, something the Office Action suggested was not claimed. Applicants have reviewed Echauz (and Esteller) and have been unable to find anything directed to this concept. Regarding the suggestion that Echauz, C. 4, L. 26-50, somehow disclosed this, Applicants respectfully disagree. This section of Echauz is merely disclosing a method to detect an event and this section fails to suggest that features of the detected event are subsequently identified or scored. Thus, this section at most discloses the "determining..." feature but fails to disclose the other features of claim 33. Therefore, as Echauz fails to disclose all the features of claim 33, Echauz cannot be said to anticipate claim 33.

Claims 34-37 depend from claim 33 and are not anticipated by Echauz for at least the above reasons and for the additional features recited therein. For example, claim 35 recites a "computing a relative severity minimum." The Office Action suggested that when Echauz stores a first value, the first value would necessarily be a minimum at that point in time. Even if the Office Action's point is accepted, however, the temporary minimum would not be a "relative severity minimum" because "relative ... minimum" implies a comparison to another value, which is something that Echauz fails to disclose. Furthermore, claim 36 recites a feature similar to the feature of claim 9, which was deemed allowable, and therefore appears to be allowable for at least the reasons provided in the Office Action with respect to claim 9. In addition, claim 37

recites the feature of "wherein (b)-(d) occur after the detection cluster has ended" and the Office Action has pointed to no point in Echauz that discloses such a feature, nor have Applicants been able to discover such a disclosure in any of the references of record.

Claim 38 recites the features of "receiving a neurological signal" and "processing the neurological signal to detect a neurological event" and "characterizing at least one feature of the detected neurological event." At most, the Office Action has provided support for the "receiving..." and the "processing ...," however no support has been shown for the "characterizing..." (or the "computing...") feature. Thus, it is unclear how Echauz can be said to disclose all the features of claim 38. Rather, Applicants respectfully submit that Echauz (along with the other references of record) fails to disclose all the features of claim 38. Accordingly, none of the references of record can be said to anticipate claim 38.

Claims 39-43 depend from claim 38 and are not anticipated for the reasons discussed with respect to claim 38 and for the additional features recited therein. For example, claim 42 would appear to be allowable for at least the reasons provided with the indication that claim 9 was deemed allowable if rewritten in independent form. Furthermore, the Office Action has not provided any indication as to how the features of claim 43 are disclosed by Echauz, nor can Applicants discern anything in Echauz that could be read to disclose such a feature.

Accordingly, withdrawal of this ground of rejection is respectfully requested. At a minimum, Applicants respectfully submit that more is required to support the rejection of claims 33-43 than has been provided to date. Thus, Applicants respectfully submit that the finality of the Office Action cannot be maintained in view of the incomplete rejection of claims 33-43

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## CONCLUSION

All rejections have been addressed. Applicants believe all pending claims are in condition for allowance and earnestly solicit prompt notification of the same.

Respectfully submitted,

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